

## WHAT IS CLAIMED IS:

1. An image processing device comprising:  
an SIMD (Single Instruction stream Multiple Data stream)  
5 calculating means for performing operations, such as motion  
compensation, motion prediction, DCT (Discrete Cosine  
Transform) processing, IDCT (Inverse Discrete Cosine  
Transform) processing, quantization, and reverse quantization  
by means of a pipeline operation unit that can be program-  
10 controlled by an outside unit;  
a VLC (Variable Length Code) processing means for  
performing variable-length encoding processing and  
variable-length decoding processing according to a given  
encoding method;

15 an external data interface means for performing a data  
transfer between the image processing device and an outside  
unit;

an instruction memory for holding an instruction to be  
processed; and

20 a processor means for decoding the instruction held by  
said instruction memory, and for performing a programmed  
control operation on said SIMD calculating means, said VLC  
processing means, and said external data interface means.

25 2. The image processing device according to Claim 1,  
wherein said instruction memory is a RAM (Random Access Memory).

3. The image processing device according to Claim 1,  
wherein said instruction memory is a ROM (Read Only Memory).